

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A reactor for preparing chlorine from hydrogen chloride by gas-phase oxidation ~~by means of~~ with oxygen in the presence of a heterogeneous catalyst in a fluidized bed (2), with gas-permeable plates (17) being located in the fluidized bed (2), wherein the gas-permeable plates (17) are connected in a thermally conductive manner to a heat exchanger (9) located in the fluidized bed (2), wherein the thermal conductivity of the gas-permeable plates (17) is greater than the thermal conductivity of the fluidized bed (2).

Claim 2 (Original): A reactor according to claim 1, wherein the heat exchanger (9) has tubes (16) which run horizontally in the fluidized bed and are connected to the gas-permeable plates (17).

Claim 3 (Original): A reactor according to claim 2, wherein the horizontal tubes (16) connect vertical heat exchanger tubes (15) of a shell-and-tube heat exchanger (9).

Claim 4 (Original): A reactor according to claim 1, wherein the gas-permeable plates (17) connect vertical plates of a plate heat exchanger to one another.

Claim 5 (Original): A reactor according to claim 1, wherein channels or tubes through which a heat transfer medium flows run through the gas-permeable plates (17).

Claim 6 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 5, wherein perforated plates are used as gas-permeable plates (17).

Claim 7 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 5, wherein ordered or unordered mesh structures are used as gas-permeable plates.

Claim 8 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 7, wherein the hydrogen chloride and the oxygen are introduced into the fluidized bed via through a windbox (3) and a gas distributor (4).

Claim 9 (Original): A reactor according to claim 8, wherein at least one perforated plate is used as gas distributor (4).

Claim 10 (Original): A reactor according to claim 8, wherein at least one plate provided with gas distributor nozzles is used as gas distributor (4).

Claim 11 (Currently Amended): A reactor according to ~~any of claims~~ claim 8 to 10, wherein an impingement device is located in the windbox (3) above the gas inflow opening.

Claim 12 (Original): A reactor according to claim 11, wherein the impingement device is a flat, round-domed or funnel-shaped metal sheet arranged transverse to the inflow direction.

Claim 13 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 12, wherein a granular fluidized-bed material comprising the heterogeneous catalyst is used to form the fluidized bed (2).

Claim 14 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 13, wherein the interior walls of the reactor (21), gas-permeable plates (17), heat exchanger surfaces, interior walls of the windbox (3) and the gas distributor (4) are made of steel or nickel alloys.

Claim 15 (Currently Amended): A reactor according to ~~any of claims~~ claim 1 to 13, wherein the gas distributor (4) is made of a ceramic material.

Claim 16 (Currently Amended): A process for preparing chlorine from hydrogen chloride by gas-phase oxidation ~~by means of~~ with oxygen using a reactor according to ~~any of claims~~ claim 1 to 15.